AMENDMENT TO THE CLAIMS

Please cancel claim 11, add claims 68-73, and amend the claims as follows:

1. (Previously Presented) A method for depositing a silicon germanium film on a substrate comprising:

providing a substrate within a process chamber;

heating the substrate to a temperature within a range from about 500°C to about 900°C;

exposing the substrate to a first deposition gas comprising silane, germanium, a carbon source, hydrogen chloride, a carrier gas, and at least one dopant gas to epitaxially and selectively deposit a first silicon germanium material on the substrate, wherein the first silicon germanium material contains a dopant concentration of about 2.5×10^{21} atoms/cm^3; and

exposing the substrate to a second deposition gas comprising dichlorosilane and a germanium source to epitaxially and selectively deposit a second silicon germanium material on the substrate.

2. (Previously Presented) The method of claim 1, wherein the at least one dopant gas is a boron containing compound selected from the group consisting of borane, diborane, triborane, trimethylborane, triethylborane, and derivatives thereof.

3. (Previously Presented) The method of claim 2, wherein the first silicon germanium material contains a boron concentration of about 2.5×10^{21} atoms/cm^3.

4. (Original) The method of claim 1, wherein the at least one dopant gas includes an arsenic containing compound or a phosphorus containing compound.

5. (Previously Presented) The method of claim 1, wherein the carrier gas is selected from the group consisting of hydrogen, argon, nitrogen, helium, and combinations thereof.

6. (Previously Presented) The method of claim 5, wherein the first deposition gas further comprises dichlorosilane.

7. (Previously Presented) The method of claim 5, wherein the temperature is within a range from about 600°C to about 750°C and the process chamber is at a pressure within a range from about 0.1 Torr to about 200 Torr.

8. (Previously Presented) The method of claim 5, wherein the silicon germanium film has a thickness within a range from about 100 Å to about 3,000 Å.

9. (Previously Presented) The method of claim 8, wherein the silicon germanium film is deposited within a device used for CMOS, Bipolar, or BiCMOS application.

10. (Previously Presented) The method of claim 9, wherein the silicon germanium film is deposited during a fabrication step selected from the group consisting of contact plug, source/drain extension, elevated source/drain, and bipolar transistor.

11. (Cancelled)

12. (Previously Presented) The method of claim 1, wherein a silicon-containing material is deposited on the substrate before the first silicon germanium material.

13. (Previously Presented) The method of claim 12, wherein the silicon-containing material is deposited by a deposition process comprising dichlorosilane.

14. (Previously Presented) A selective epitaxial method for depositing a silicon germanium film on a substrate comprising:

placing a substrate within a process chamber;

heating the substrate to a temperature within a range from about 500°C to about 900°C; and

exposing the substrate to a deposition gas comprising silane, a germanium source, a carbon source, an etchant source, a carrier gas, and at least one dopant gas to epitaxially and selectively form a silicon germanium material containing a dopant concentration of about 2.5×10^{21} atoms/cm^3.

15. (Previously Presented) The method of claim 14, wherein the germanium source is selected from the group consisting of germane, digermane, trigermane, tetragermane, and derivatives thereof.

16. (Previously Presented) The method of claim 15, wherein the carrier gas is selected from the group consisting of hydrogen, argon, nitrogen, helium, and combinations thereof.

17. (Previously Presented) The method of claim 16, wherein the temperature is within a range from about 600°C to about 750°C and the process chamber is at a pressure within a range from about 0.1 Torr to about 200 Torr.

18. (Previously Presented) The method of claim 17, wherein the etchant source is selected from the group consisting of hydrogen chloride, tetrachlorosilane, tetrachloromethane, dichloromethane, chlorine, derivatives thereof, and combinations thereof.

19. (Previously Presented) The method of claim 14, wherein the at least one dopant gas is a boron containing compound selected from the group consisting of borane, diborane, triborane, trimethylborane, triethylborane, and derivatives thereof.

20. (Original) The method of claim 14, wherein the at least one dopant gas is selected from the group consisting of an arsenic containing compound and a phosphorus containing compound.

21. (Previously Presented) The method of claim 14, wherein the deposition gas further comprises dichlorosilane.

22. (Previously Presented) The method of claim 17, wherein the silicon germanium film has a thickness within a range from about 100 Å to about 3,000 Å.

23. (Previously Presented) The method of claim 22, wherein the silicon germanium film is deposited within a device used for CMOS, Bipolar, or BiCMOS application.

24. (Previously Presented) The method of claim 23, wherein the silicon germanium film is deposited during a fabrication step selected from the group consisting of contact plug, source/drain extension, elevated source/drain, and bipolar transistor.

25. (Previously Presented) The method of claim 14, wherein the silicon germanium material is deposited having a first thickness, thereafter, the silane is replaced by dichlorosilane, and a second silicon germanium material is epitaxially and selectively deposited having a second thickness on the silicon germanium material.

26. (Previously Presented) The method of claim 14, wherein a silicon-containing material is deposited on the substrate before the silicon germanium material.

27. (Previously Presented) The method of claim 26, wherein the silicon-containing material is deposited by a deposition process comprising dichlorosilane.

28-41. (Cancelled)

42. (Previously Presented) A method for depositing a silicon germanium film on a substrate comprising:

placing a substrate within a process chamber;

heating the substrate to a temperature within a range from about 500°C to about 900°C; and

exposing the substrate to a deposition gas comprising a silicon-containing gas, a germanium source, a carbon source, hydrogen chloride, and a boron-containing dopant gas to epitaxially and selectively deposit a silicon germanium material on the substrate, wherein the silicon germanium material contains a boron concentration of about 2.5×10^{21} atoms/cm^3.

43-55. (Cancelled)

56. (Previously Presented) A method for depositing a silicon germanium film on a substrate comprising:

placing a substrate within a process chamber;

exposing the substrate to a first deposition gas comprising silane, a first germanium source, a carbon source, hydrogen chloride, and a carrier gas to epitaxially deposit a first silicon germanium containing material having a first thickness on the substrate and containing a dopant concentration of about 2.5×10^{21} atoms/cm^3; and

exposing the substrate to a second deposition gas comprising dichlorosilane and a second germanium source to epitaxially deposit a second silicon germanium containing material having a second thickness on the first silicon germanium containing material.

57. (Previously Presented) The method of claim 56, wherein the first silicon germanium containing material is selectively deposited on the substrate.

58. (Previously Presented) The method of claim 57, wherein the first deposition gas further comprises at least one dopant gas.

59. (Previously Presented) The method of claim 58, wherein the at least one dopant gas comprises an element selected from the group consisting boron, arsenic, phosphorus, and combinations thereof.

60. (Previously Presented) The method of claim 59, wherein the at least one dopant gas comprises a boron containing compound selected from the group consisting of borane, diborane, triborane, trimethylborane, triethylborane, and derivatives thereof.

61. (Previously Presented) The method of claim 57, wherein the second silicon germanium containing material is selectively deposited on the substrate.

62. (Previously Presented) The method of claim 61, wherein the second deposition gas further comprises hydrogen chloride and at least one dopant gas.

63. (Previously Presented) The method of claim 62, wherein the at least one dopant gas comprises an element selected from the group consisting boron, arsenic, phosphorus, and combinations thereof.

64. (Previously Presented) The method of claim 63, wherein the at least one dopant gas comprises a boron containing compound selected from the group consisting of borane, diborane, triborane, trimethylborane, triethylborane, and derivatives thereof.

65. (Previously Presented) The method of claim 57, wherein the first and second germanium sources are independently selected from the group consisting of germane, digermane, trigermane, tetragermane, and derivatives thereof.

66. (Previously Presented) The method of claim 65, wherein the first and second thicknesses are independently within a range from about 100 Å to about 3,000 Å.

67. (Previously Presented) The method of claim 66, wherein the substrate is heated to a first temperature during the exposure of the first deposition gas and to a second temperature during the exposure of the second deposition gas, wherein the first and second temperatures are independently a temperature within a range from about 500°C to about 900°C.

68. (New) The method of claim 3, wherein the carbon source is an organosilane.

69. (New) The method of claim 68, wherein the carbon source is methylsilane.

70. (New) The method of claim 19, wherein the carbon source is an organosilane.

71. (New) The method of claim 70, wherein the carbon source is methylsilane.

72. (New) The method of claim 60, wherein the carbon source is an organosilane.

73. (New) The method of claim 72, wherein the carbon source is methylsilane.